

# Scottsdale, the original Green-Blue Zone City:

## The Synergy Between Certified Green Buildings and Blue Zones

By Denise van den Bossche

**January 30, 2024, Scottsdale, AZ** The City of Scottsdale has recognized the symbiotic relationship between green building certification and the growing Blue Zones concept, and is working to become the nation's *Greenest Blue Zones* community. Green homes are based on environmental stewardship, sustainability, and the health and wellness of *building* occupants. Blue zones are regions where people live longer, with metrics based on community, healthy lifestyle, and many *outdoor* factors. Since the green and blue concepts here have many overlaps, the integration of the two is a brilliant plan in the quest for longevity. Scottsdale was one of the first municipalities to establish a green building program. Since its inception in 1998, the city has refined and perfected its program, turning it into a nationally recognized exemplar. Augmenting the greening of the building environment with the year-round accessibility and lifestyle which has attracted residents to Scottsdale for decades, will have a positive impact collectively on individuals and communities.

### Cultivating Longevity and Well-being

Blue zones are regions around the world where people consistently live longer, healthier lives. These areas share common characteristics that contribute to the well-being of their inhabitants, including a sense of community, a heavy plant-based diet, regular physical activity, and strong social connections.

Certified green buildings are designed to minimize their ecological footprint and therefore promote sustainability, while focusing on the health of the occupants.

The integration of certified green buildings aligns seamlessly with the principles of blue zones.

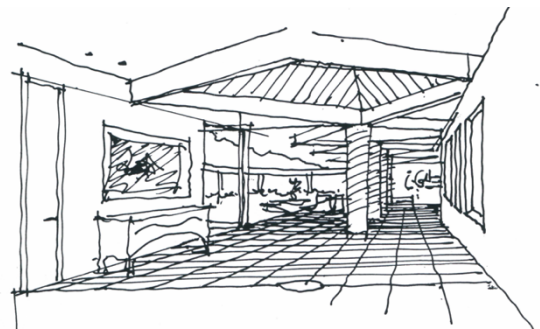


Figure 1-10500 E Lost Canyon #34 Scottsdale 85255, an early recipient of the Scottsdale Green Building Certification

## The Synergy Between Certified Green Buildings and Blue Zones:

- **Health and Well-being:** Green buildings contribute to healthier living spaces, while the principles of blue zones emphasize holistic well-being. The combination of these factors creates environments that support physical, mental, and emotional health.
- **Community Engagement:** Both certified green buildings and blue zones promote a sense of community. Green building projects involve community participation in design and implementation, (“Charettes”) fostering a collective commitment to sustainability. Green infrastructure takes this a step further by involving multiple jurisdictions to foster collaboration on pressures caused by budgets and political agendas as they encroach on engineering best practices.
- **Environmental Stewardship:** Blue zones prioritize a harmonious relationship with nature, and certified green buildings align with this ethos by minimizing environmental impact. Together, they contribute to the preservation of natural resources and ecosystems.
- **Sustainable Lifestyles:** The principles of blue zones encourage sustainable lifestyles, including plant-based diets and regular physical activity. Green buildings complement these practices by providing spaces that encourage active living and access to green spaces.
- **Outdoors Activities:** Scottsdale has more than 400 miles of well-maintained trails and is considered one of the top 15 hiking destinations in the U.S. Scottsdale boasts more than 200 golf courses, but more important are the 299 sunny days per year, with average temperature of 72.5 degrees and low rainfall rate, allowing enjoyment of the many outdoor amenities year round. In addition to the hiking, biking, and horseback riding trails, Old Town Scottsdale offers art galleries, farmers markets, boutiques, museums, restaurants, Spring Training, Professional Sports and seasonal events. Residents are considered to be some of the happiest and healthiest citizens in the nation.



## Scottsdale Arizona: Setting the Precedent in green buildings

Established in 1998, Scottsdale's residential Green Building Program was the first in the state and the fifth in the nation, one of only five cities in the country to offer homebuilders green building

certification. It was specifically designed for desert living. By 2023, Scottsdale became one of only a few nationwide to mandate 'green' building code requirements for both residential and commercial.

### **Demonstration of the Scottsdale Green Home Certification**

Lost Canyon community is a guard gated community in the McDowell Mountain Preserve just north of the 101 loop, near Silverleaf, and DC Ranch.

The McDowell Sonoran Preserve is more than 30,500 acres of perpetually preserved open space with over 225 miles of hiking, the largest urban preserve in the U.S., where visitors can explore the lush Sonoran Desert on hundreds of miles of hiking, biking and horseback riding trails.

Lost Canyon consists of just 35 home sites ranging from 6 to 10 acres each. The design guidelines closely resemble a charette. The environment is described as “a natural amphitheater of desert foothills, ravines, washes and rock outcroppings enhanced by an established Sonoran desert landscape with minimal alteration.” Building envelopes are pre-defined to protect views, natural drainage, and undisturbed desert.

The 5-Bedroom home on lot #34 was one of the original homes certified under Scottsdale’s Green Building program in 2008. Below are some of the criteria achieved:

- **High Energy Efficiency.** High SEER equipment with heavily insulated walls, roof, doors, windows, foundation systems; sealed insulated ducts, recessed lighting; task lighting; passive ventilation; ceiling fans; roof radiant barrier; exterior air infiltration barrier; minimum solar heat gain coefficient glass; diagnostic blower door test confirming tight house seal.
- **Site.** Minimum impact on site; natural desert vegetation; non-permeable walkways and driveways; home orientation to maximize efficiency; rain sensor shut-offs; 90% xeriscape; no chemical herbicides or pesticides within building footprint
- **Indoor Air Quality.** Calculated Air Exchange coefficient; Interior finishes & adhesives minimizing VOCs (volatile organic compound); Zoned air with independent temperature control for all habitable rooms; Minimal duct leakage measurements; Whole house filtration system; Central vacuum system with outside exhaust; Sealed combustion water heater and fireplace; Heat recovery ventilators (or air-to-heat exchanger); Passive radon ventilation system; No cooktop combustion of fossil fuels; Domestic sustainably sourced materials with non-toxic binders; Exposed substate materials sealed with formaldehyde-blocking finish

- **Environmental.** Recycling center; Recycled and certified sustainably sourced material content;



Smart wiring system; Roof prep and electrical rough-in for future solar photovoltaic power; Roofing with minimum 25 year manufacturer warranty; Reflective roof surface; Integrally colored stucco of fiber cement. More information on certification metrics available upon request.

### **Conclusion:**

The collaboration between certified green buildings and blue zones represents a powerful approach to creating sustainable, health-focused communities. As we spend the majority of our days working, playing and learning in indoor environments, the integration of green building practices within the context of blue zones offers a promising pathway toward longevity. Environmental stewardship allows us to use today's resources without jeopardizing future generations, a sustainable plan moving forward. By embracing these principles, we can build not only structures that stand the test of time but communities that thrive in harmony with both people and the planet.

About the Author:. Denise van den Bossche is the Listing Agent of 10500 E. Lost Canyon #34, a REALTOR® and Associate Broker with Realty Executives. Denise was the State Chair of the Arizona U.S. Green Building Council™ in 2008, and maintains a Legacy LEED (Accredited Professional) AP®. More information at [www.Exec-Elite.com](http://www.Exec-Elite.com) or [www.LostCanyonScottsdale.com](http://www.LostCanyonScottsdale.com)

